

**MULTICASTING OPTICAL SWITCH FABRIC AND METHOD OF  
DETECTION BASED ON NOVEL HETERODYNE RECEIVER**

**ABSTRACT OF THE DISCLOSURE**

5           The inventors propose herein a switch fabric architecture that allows  
broadcasting and fast channel access in the ns-range. In various embodiments  
of the present invention, 10Gb/s receiver modules are based on a novel  
heterodyne receiver and detection technique, which is tolerant to moderate  
wavelength drifts of a local oscillator. A gain clipped electrical amplifier is used  
10   in the novel receiver as a rectifier for bandpass signal recovery.